

ABSTRACT

A gas turbine has a cooling air system supplying  
air for cooling a high temperature part of the gas  
5 turbine and a spray air system supplying air for  
spraying fuel into a combustor and is formed so that a  
part of high-pressure air compressed by a gas turbine  
compressor is used as air of the cooling air system  
and spray air system, wherein a heat exchanger and a  
10 boost compressor are arranged downstream of the outlet  
of compressed air of the gas turbine compressor, and  
the boost compressor is composed of a parallel  
connection of a compressor driven by the turbine shaft  
and a compressor driven by a driven source other than  
15 the turbine shaft, and pressurized air from the boost  
compressor is used as air for the cooling air system  
and the spray air system.

Selected Figure: Fig. 1

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